

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (currently amended) A capacitor dielectric comprising a material formed from a two-component plasma reaction in a substantially air-evacuated plasma chamber, a first component of the two-component plasma reaction comprising a non-carbon containing and non-oxygenated silicon donor, and a second component of the two-component plasma reaction comprising a non-silicon containing and non-oxygenated organic precursor selected from the group consisting of alkanes, alkenes, phenyls and aromatic hydrocarbons, the material comprising (Si-H) and (Si-Si) fragments interstitially situated in an organic polymer matrix.
2. (cancel)
3. (original) The capacitor dielectric of claim 1 wherein the second component of the two-component plasma reaction is selected from the group consisting of ethylene, methane, ethane and toluene.
4. (original) The capacitor dielectric of claim 1 wherein the first component of the two-component plasma reaction is selected from the group consisting of monosilane, disilane and dichlorsilane.
5. (original) The capacitor dielectric of claim 4 wherein the second component of the two-component plasma reaction is selected from the group consisting of ethylene, methane, ethane and toluene.
6. (currently amended) The capacitor dielectric of claim 1 wherein the capacitor dielectric is photo-oxidized by exposure to a radiated electromagnetic energy in the presence of oxygen to oxidize silicon in the (Si-H) and (Si-Si) fragments whereby to alter the dielectric constant of the capacitor dielectric is altered subsequent to the formation of the capacitor dielectric.
7. (currently amended) A capacitor comprising:
 - a first conductor;
 - a dielectric formed on the first conductor from a two-component plasma reaction in a substantially air-evacuated plasma chamber, a first component of the two-component plasma reaction comprising a non-carbon containing and non-oxygenated silicon donor,

and a second component of the two-component plasma reaction comprising a non-silicon containing and non-oxygenated organic precursor selected from the group consisting of alkanes, alkenes, phenyls and aromatic hydrocarbons, the dielectric comprising (Si-H) and (Si-Si) fragments interstitially situated in an organic polymer matrix; and

a second conductor formed on the dielectric.

8. (cancel)

9. (original) The capacitor of claim 7 wherein the second component of the two-component plasma reaction is selected from the group consisting of ethylene, methane, ethane and toluene.

10. (original) The capacitor of claim 7 wherein the first component of the two-component plasma reaction is selected from the group consisting of monosilane, disilane and dichlorsilane.

11. (original) The capacitor of claim 10 wherein the second component of the two-component plasma reaction is selected from the group consisting of ethylene, methane, ethane and toluene.

12. (currently amended) The capacitor of claim 7 wherein the dielectric is photo-oxidized by exposure to a radiated electromagnetic energy in the presence of oxygen to oxidize silicon in the (Si-H) and (Si-Si) fragments whereby ~~to alter the~~ dielectric constant of the dielectric is altered subsequent to the formation of the dielectric.

13. (currently amended) The capacitor of claim 7 wherein the dielectric is photo-oxidized by exposure to a radiated electromagnetic energy in the presence of oxygen to alter the dielectric constant of the dielectric when the capacitor is in an electrically active circuit by oxidation of silicon in the (Si-H) and (Si-Si) fragments.

14. (currently amended) An electrical filter comprising:

a one or more capacitors, an at least one of the one or more capacitors comprising:

a first conductor;

a dielectric formed on the first conductor from a two-component plasma reaction in a substantially air-evacuated plasma chamber, a first component of the two-component plasma reaction comprising a non-carbon containing and non-oxygenated silicon donor, and a second component of the two-component plasma reaction comprising a non-silicon containing and non-oxygenated organic precursor selected from the group

consisting of alkanes, alkenes, phenyls and aromatic hydrocarbons, the dielectric comprising (Si-H) and (Si-Si) fragments interstitially situated in an organic polymer matrix; and

a second conductor formed on the dielectric; and

a one or more inductors electrically connected to the one or more capacitors to form an electrical filter.

15. (original) The electrical filter of claim 14 wherein an at least one of the one or more inductors comprises an on-chip spiral inductor.

16. (canceled)

17. (canceled)

18. (canceled)

19. (previously presented) The electrical filter of claim 14 wherein the second component of the two-component plasma reaction is selected from the group consisting of ethylene, methane, ethane and toluene.

20. (previously presented) The electrical filter of claim 14 wherein the first component of the two-component plasma reaction is selected from the group consisting of monosilane disilane and dichlorsilane.

21. (currently amended) An electrical filter comprising:

a one or more capacitors, an at least one of the one or more capacitors comprising:

a first conductor;

a dielectric formed on the first conductor from a two-component plasma reaction in a substantially air-evacuated plasma chamber, a first component of the two-component plasma reaction comprising a non-carbon containing and non-oxygenated silicon donor, and a second component of the two-component plasma reaction comprising a non-silicon containing and non-oxygenated organic, the dielectric comprising (Si-H) and (Si-Si) fragments interstitially situated in an organic polymer matrix, the dielectric photo-oxidized by exposure to a radiated electromagnetic energy in the presence of oxygen to oxidize silicon in the (Si-H) and (Si-Si) fragments whereby to alter the dielectric constant of the dielectric is altered subsequent to the formation of the dielectric; and

a second conductor formed on the dielectric; and

a one or more inductors electrically connected to the one or more capacitors to form an electrical filter.

22. (previously presented) The electrical filter of claim 21 wherein the first component of the two-component plasma reaction is selected from the group consisting of monosilane, disilane and dichlorsilane.

23. (previously presented) The electrical filter of claim 22 wherein the second component of the two-component plasma reaction is selected from the group consisting of ethylene, methane, ethane and toluene.